

Commonwealth of Massachusetts
Executive Office of Health and Human Services



Health Information Technology Council July Meeting

July 1, 2013

3:30-5:00 P.M.

One Ashburton Place, 21st Floor, Boston



Agenda



Today's Agenda:

- 1. Meeting Minutes approval [5 min]**
- 2. Mass HIway Implementation Updates**
 - a) Massachusetts eHealth Collaborative [20 min] – Micky Tripathi
 - b) Meditech [20 min] – John Valutkevich
- 3. Advisory Group Discussion & Updates [25 min] – Micky Tripathi**
- 4. Mass HIway Update**
 - a) Outreach & Sales Update [5 min] – Sean Kennedy
 - b) Implementation & Support Update [5 min] – Manu Tandon
 - c) Phase 2 Update [5 min] – Manu Tandon
- 5. Wrap up and next steps [5 min] – Manu Tandon**



**Discussion Item 1:
Mass HIway Implementation Updates –
Massachusetts eHealth Collaborative
Meditech,**

Commonwealth of Massachusetts
Executive Office of Health and Human Services



Launching the MAeHC Quality Data
Center on the MA HIway

July 1, 2013





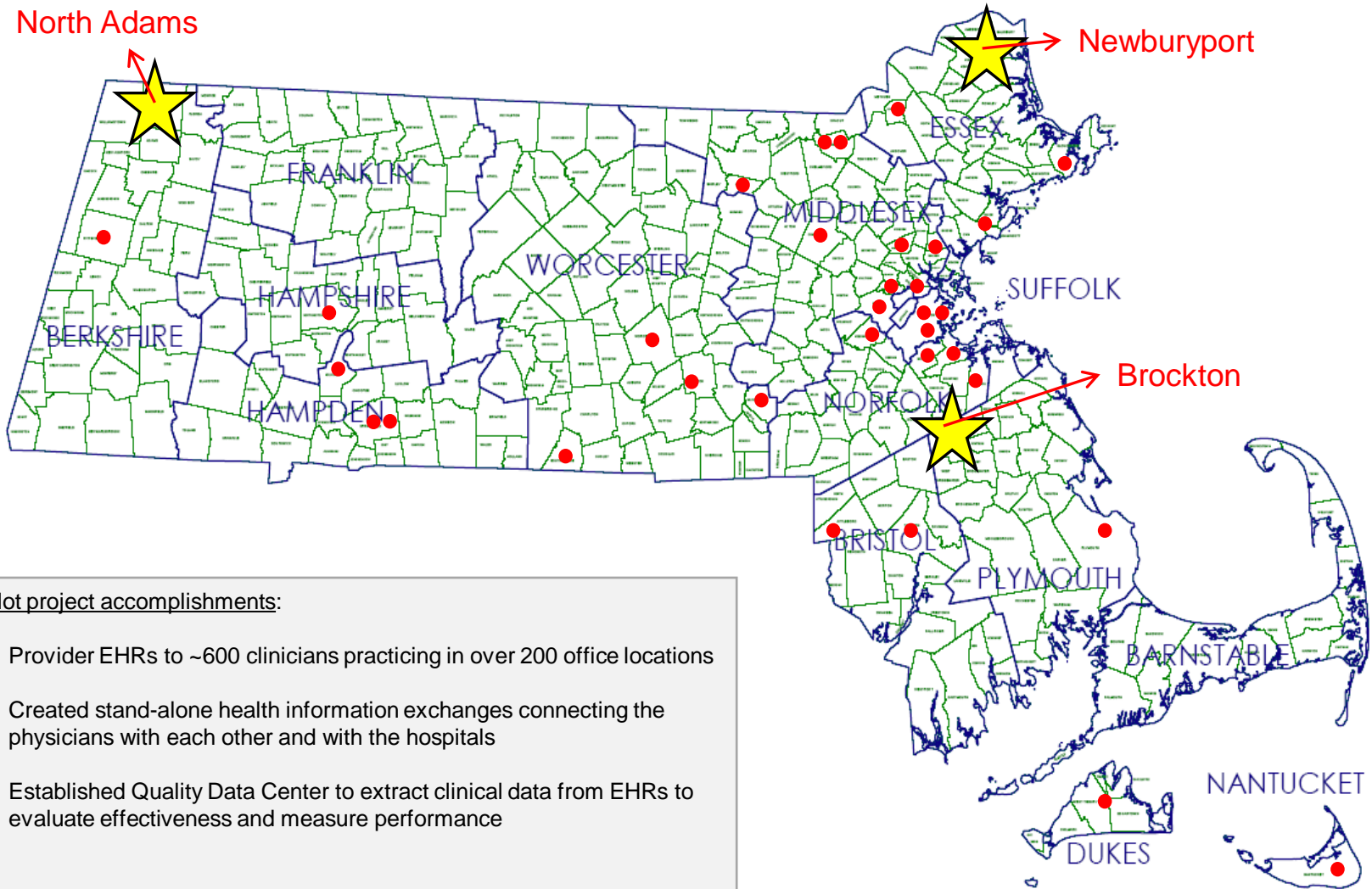
MAeHC Pilot Program: 2005-2008



North Adams

Newburyport

Brockton



Pilot project accomplishments:

- Provider EHRs to ~600 clinicians practicing in over 200 office locations
- Created stand-alone health information exchanges connecting the physicians with each other and with the hospitals
- Established Quality Data Center to extract clinical data from EHRs to evaluate effectiveness and measure performance



MAeHC Pilot Project Architecture and Data Flows



Analysis and Reporting

Quality Data Center

Community-level: HIE

Provider-level: EHR

Outcomes analysis

Benchmarking

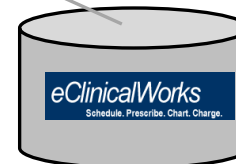
Reporting to plans, others?



Brockton



Newburyport



North Adams



NextGen

ALLSCRIPTS™
Inform. Connect. Transform.



eClinicalWorks
Schedule. Prescribe. Chart. Charge.

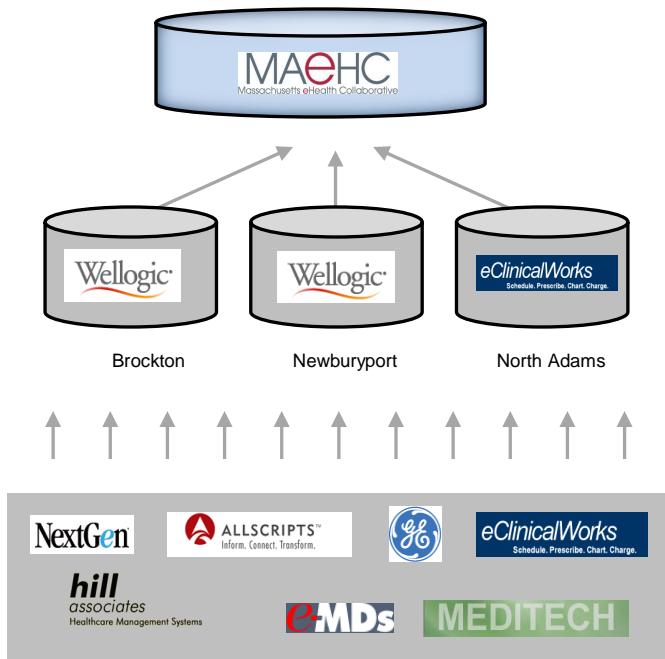
hill
associates
Healthcare Management Systems

eMDs

MEDITECH



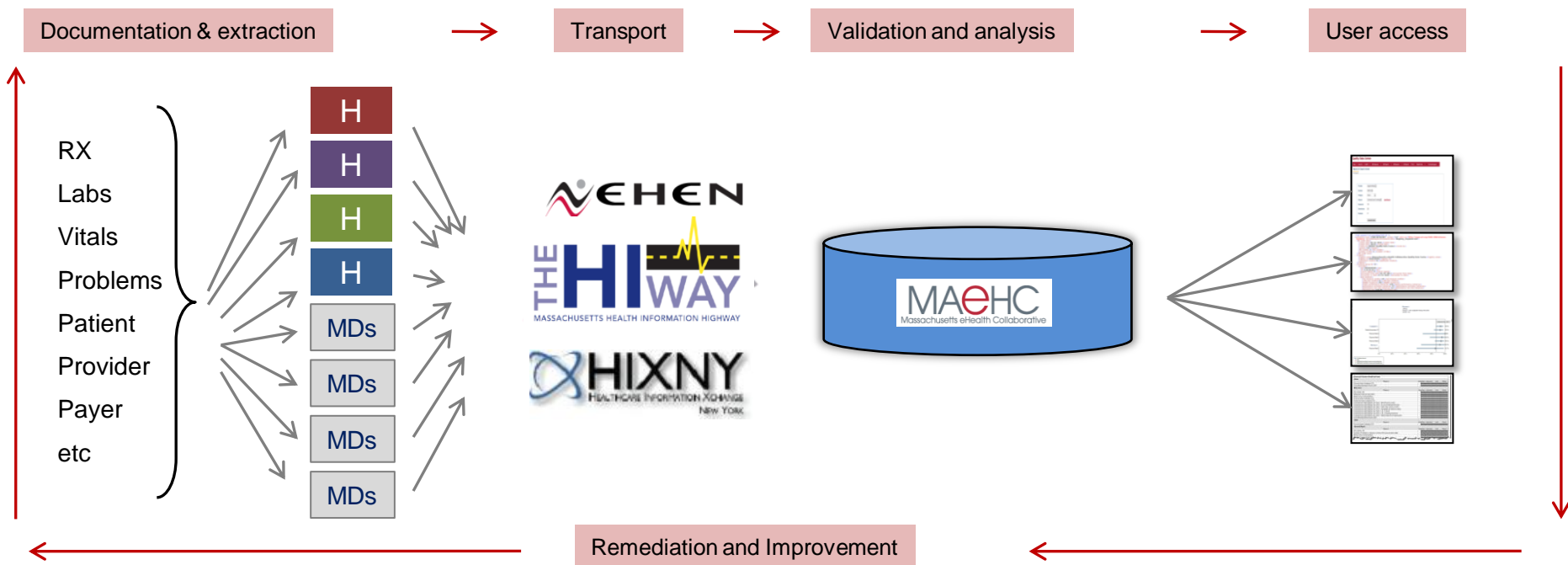
Life on the Bleeding Edge: 2006-2008



- All standards developed by MAeHC
 - National EHR certification did not exist
 - No nationally approved standards for content, transport, or measurement
 - EHR usage requirements designed from scratch to support robust quality measurement
- Designed to leverage community HIEs
 - Consent-based information flow
 - Patient-matching within HIEs
 - Pseudonymization of patient identity
 - Re-identification managed at HIEs



Performance Measurement Process Steps





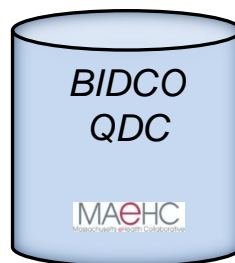
BIDCO QDC



Beth Israel Deaconess | CARE ORGANIZATION LLC

webOMR

eClinicalWorks



Current status:

- 5,611,698 care event C32 records
- Covers 614,829 unique patients
- Covers 2,506 unique providers



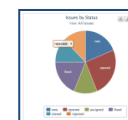
Electronic reporting
• MU, PQRS, AQC, etc



Data management
• Report viewing
• Case tracking



Data extraction
• Queries
• Pre-defined data marts



Management Info System
• User information
• Utilization analysis
• Other

Documentation & extraction

Transport

Validation and analysis

User access



eClinicalWorks



Current status:

- 760,923 care event C32 records
- Covers 155,740 unique patients
- Covers 300+ unique providers



ADIRONDACK HEALTH INSTITUTE

Pod 1



- Data management
- Report viewing
 - Case tracking

Pod 2



- Data management
- Report viewing
 - Case tracking

Pod 3



- Data management
- Report viewing
 - Case tracking

Documentation & extraction

Transport

Validation and analysis

User access

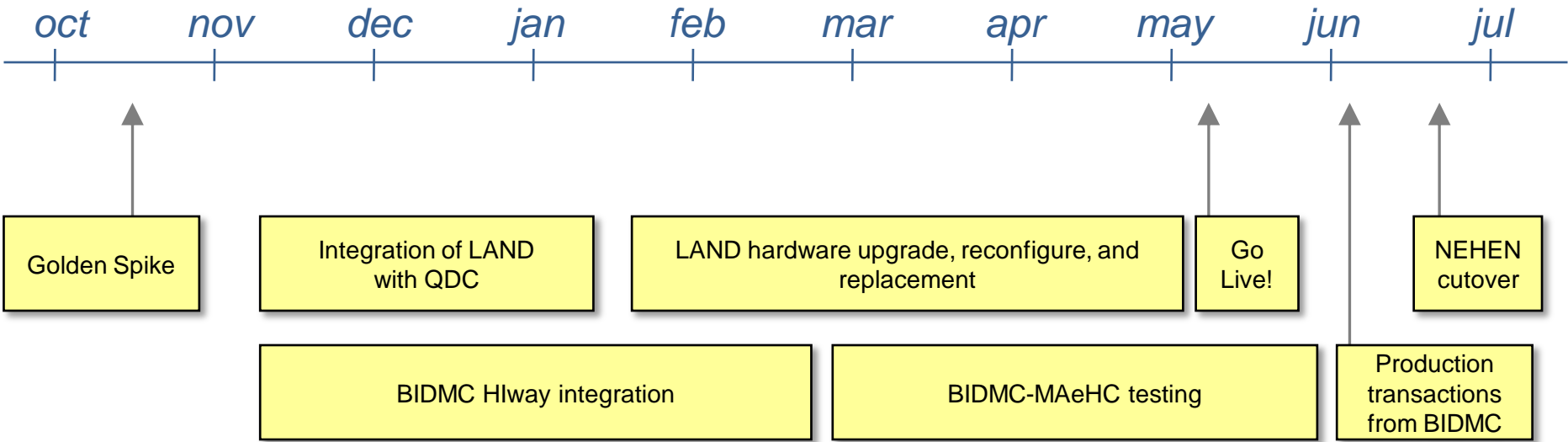


HIway Implementation Process



2012

2013





Our overall experience



- **Lots of growing pains**
 - Hardware
 - Integration with QDC
- **What we had to do**
 - Be patient and flexible
 - Tolerate ambiguity
 - Recognize that everyone was working as hard as they could
- **Current status**
 - HIway seems to be working perfectly – messages being processed faster than NEHEN
 - Have received 80K+ records from BIDMC since go-live (3K+ per day)
- **Future plans**
 - Migrate remainder of BIDCO practices from NEHEN
 - Bring additional customers onto HIway as soon as possible



MEDITECH's Update

AGENDA

- **MEDITECH's Vital Signs and Massachusetts Presence**
- **MEDITECH's Direct Solution – Ready for the HIWay !**
- **Direct Messaging Center Workflows**
- **MEDITECH Pilot Clients**
- **Recommendations for the HIT Committee**

We Have a Strong Local Presence in Massachusetts

- Massachusetts Market Share
 - Acute Care, Critical Access, Children Hospitals: 66%
 - Long Term Care: 75%
 - Rehab: 18%
 - Psych: 50%
- 87 Massachusetts Hospitals
 - 6.x - 11 hospitals
 - Client/Server - 34 hospitals
 - MAGIC - 42 hospitals





MEDITECH Direct Solutions and Workflows

John Valutkevich
Manager EHR Initiatives

• Meaningful Use Requires:

- **Stage 1**

The EP, eligible hospital, or CAH that transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 50 % of transitions of care and referrals.

- **Stage 2**

Provide summary of care document for more than 50% of transitions of care and referrals **with 10% sent electronically** and at least one sent to a recipient with a different EHR vendor or successfully testing with CMS test EHR





Utilizing Direct in MEDITECH Platforms



- Direct is part of MEDITECH Product Releases:
 - MAGIC 5.66
 - Client/Server 5.66
 - 6.07
 - 6.13
- MEDITECH customers either have or are being delivered this release
- Direct is either an add-on component to the existing CCD Interface Suite or is licensed as a new CCD Interface Suite
- The payload is a CCDA



Direct Components



- MEDITECH can be configured to connect to any HISP
 - Remain HISP Agnostic
 - HISP Services
 - Manage Certificates
 - Manage Addresses
 - How Many Addresses ?
 - Recommend Organizational to Start
 - Add physicians as needed
 - Physician Address Book - Adoption
- Current Certification for SMIME/SMTP
- Pending Certification for optional XDR/SOAP transactions



Workflows



- Stand Alone Routine for Medical Records and Clinicians
 - Bi-Directionally send and receive CCDAs
- Incorporated into Discharge Routines
- Available for patients via MEDITECH Portal





Transitions of Care: Consider the Workflow

Barney, Stephen
#70/M-01/21/1938

Return Contact Submitter Insurance A/M Info Provider Visit Allergies

Home: Barney, Stephen
Birthdate: Age: 01/21/1938 70
Sex: M
Other Name:
Mother's Name:
Address: 123 Elm St.
City: Medford MA 02155
State: MA Zip: 02155

Home Phone: (781) 774-4334
Other Phone:
Email:
Link Email:
Hospital Status: N
Ref: Set Num:
Race:
Religion:
Affiliation:

Employer:
Name:
Address:
City:
State: Zip:
Phone:
Occupation:
Emp Status:

Query sent based on registration

Barney, Stephen
#70/M-01/21/1938

History & Physical
Signed: Symes, Daniel 06/05/08

06/05/08 11:14 History & Physical Signed: Symes, Daniel 06/05/08

Medical Summary

Summary:

History:

Current Medications:

Lab Test Results:

Immunizations:

Barney, Stephen
#70/M-01/21/1938

External Medical Summary
EMR
Summary Report



Direct Enabled Message Center



Process DIRECT Messages - HIM Dept: AHIM (AR6X/AR6XF/AR6X.CERTF) - (TEST 6.07) - Valutkevich,John M [EST]

User: Valutkevich,John M

DIRECT Address: jval@direct.meditech.com
Last checked for new messages: 01:05

<input checked="" type="checkbox"/>	Subject	From	Date/Time ▲
<input type="checkbox"/>	Referring Don Felder	jval@direct.meditech.com	03/04/13 01:03
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			

Message

I am referring Don Felder to you after noticing something unusual in his X-RAY. Please schedule an appointment for follow-up

Attachment	Import CCD	Status
ccd.xml		
doc00001.xml		Pending

Sender Info

Signature direct.meditech.com
Status Verified

Select List

Compose Reply Delete

Get Messages ?



Direct Enabled Message Center



MIS - Import Clinical Summary - (AR6X/AR6XN/AR6X.CERTN) - John M Valutkevich

File Name C:\Documents and Settings\All Users\Application Data\Meditec

*Patient FELDER,DON

From Clinical Summary		From Patient Record	
Name	FELDER,DON	Name	
DOB	04/07/1947	DOB	
Sex	M	Sex	

Continuity of Care Document
Created on: February 25, 2013

Patient: FELDER, DON
Sex: Male
DOB: 04/07/1947
External Reference #: F0-B20130205053435705

Demographics

Address	1 TELECASTER WAY HOLLYWOOD, MA 01545
Home Phone	617-566-1965
Preferred Language	English
Marital Status	Married
Religious Affiliation	Unknown
Race	Black or African American
Ethnic Group	Non Hispanic or Latino

Search and Link

Cancel OK ? [Icons]



Send CCDA Outbound via Discharge

SHARPE,MARY DZ00000390 - PCS Open Chart - HIM Dept: AHIM (AR6X/AR6XF/AR6X.CERTF) - (TEST 6.07) - Valutkevich,John M [EST]

Sharpe,Mary DA00000000585 DZ00000390
53 F 09/19/1959 F00000391
ADM IN 1N 302-2 Allergy/Adv: penicillin G, Codeine

Discharge Plans Discharge Data Care Team

Type	Document	Detail
Instructions	Angina	
Stand Alone Forms		
Prescriptions		
Visit Report		
- Forms		
- Referrals	Valutkevich,John M (Staff Physician)	
- Care Plan Goals	CARE PLAN PLEASE FOLLOW ALL INSTRUCTIONS PER YOUR PHYSICIAN	
- Activity Restrictions/ Additional Instructions		
Addl Reference Links		
Addl Reference Text		
Print Language		

+ X

Print Packet Print By Type Reports

Cancel Save

Status Board
Select Visits
Summary
Review Visit
Notices
New Results
Clinical Panels
Vital Signs
I & O
Medications
Laboratory
Microbiology
Blood Bank
Reports
Patient Care
Notes
Refresh EMR
Orders
Amb Orders
Clinical Data
Plan Of Care
Worklist
Mar
Write Note
TAR
Discharge



Send CCDA Outbound via Portal



Abe Abraham's

Health Summary



Home



Log Off

Send Health Summary

Securely exchange your Health Summary with your provider. Contact your provider to obtain their eHealth Exchange address. To send your Health Summary, enter your provider's eHealth Exchange address and select Send.
[Learn More](#)

Enter your provider's eHealth address. You may also type the first few characters of the address and select the search button to find an eHealth address.

Enter Provider's eHealth address:



Re-enter Provider's eHealth address:

Send



Contact Us



Do Not Send.
Return to
Health Summary



Mass Hlway MEDITECH Pilot Sites



Customer Site	Platform
Berkshire Hospital	Client Server
Beth Israel Deaconess (Milton, Needham)	MAGIC
Harrington Hospital	Client Server
Holyoke Hospital	MAGIC
Jordan Hospital	6.0
Winchester Hospital	MAGIC



MEDITECH Recommendations



- **Organizational Direct Addresses for Acute Facilities**
- **Certificate Management Education for customers**
- **Use Case Education**
- **Readiness Assessments of an Organization's surrounding EMR systems and Trading Partners**



SUMMARY

- **MEDITECH Customers are SMTP/SMIME compliant messaging ready**
- **Adoption of Provider Directory Specification**
- **Use Cases**
 - **Discharge**
 - **ED Admission**
- **We need MeHI's help with education**



Discussion Item 2: Advisory Group Discussion & Updates

Commonwealth of Massachusetts
Executive Office of Health and Human Services

Phase 2 Preliminary Design



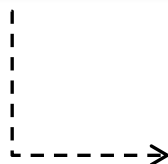


Mass Hlway Phasing

Phase 1

Send and receive

- Create infrastructure to enable secure transmission (“directed exchange”) of clinical information
- Will support exchange among clinicians, public health, and stand-alone registries
- Focus on breadth over depth
- Example: Patient has been discharged from hospital and wants hospital to send discharge summary to PCP



Phase 2

Search and retrieve

- Create infrastructure for cross-institutional queries for and retrieval of patient records
- Add additional public health services
- Example: Patient has been admitted to hospital and wants hospitalist to have patient record from PCP



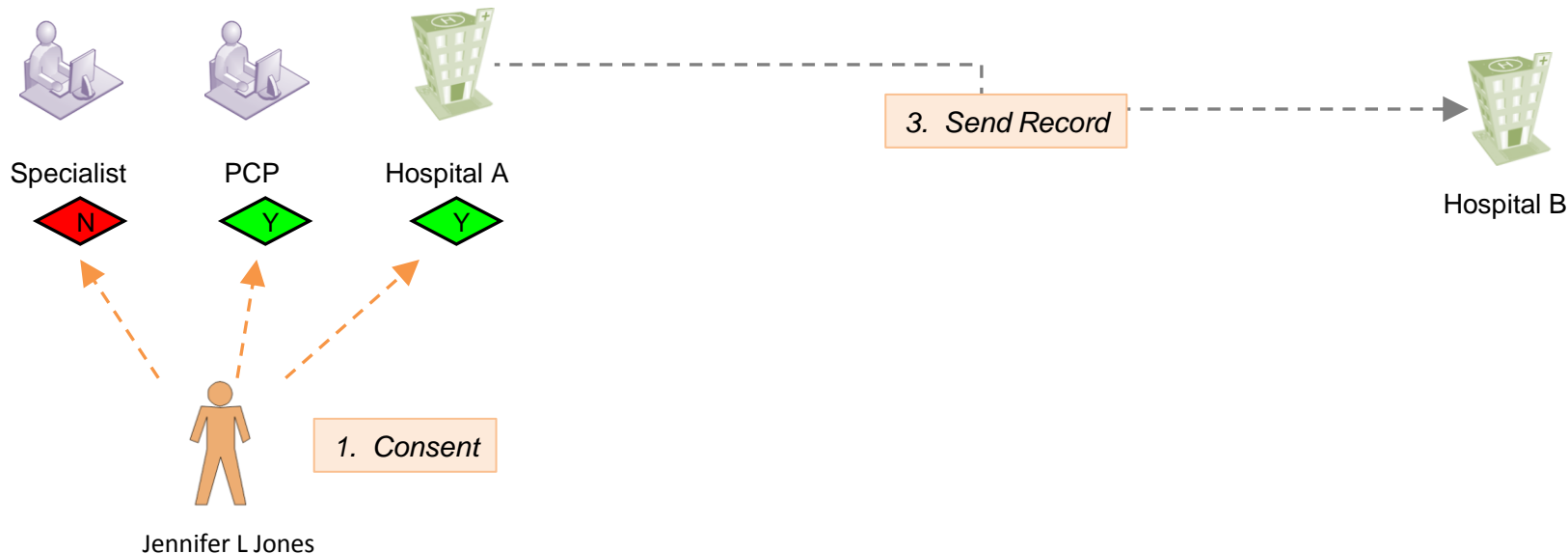
Phase 1 Functions: User-to-User Push



Provider Directory

<u>Provider name</u>	<u>Local name Certificate</u>	<u>Institution</u>	<u>Direct address</u>
Smith, Marilyn M	Smith, Marilyn 58&HTU	Hospital B	Marilyn.Smith@HospB.masshighway.net
Smith, Marilyn M	Smith, Mary 93T\$@N	Highland Primary Care	Marilyn.Smith@HPC.masshighway.net

2. Lookup Provider Address





Framework for Query for a Patient Record

Current Direction of Federal Certification Approach for MU

Stage 3



Data Requestor

Discover provider address and security credentials



Send:

- Authenticating credentials
- Patient-identifying information
- Authorization for request
- Type of information being requested (optional)

Restful web services

query

Receive:

- Medical record information or acknowledgment of non-fulfillment of request
- Log transaction

Data holder

Receive:

- Validate authentication credentials
- Match patient
- Verify authorization for request
- Check for requested information



Send:

- Medical record information or acknowledgment of non-fulfillment of request
- Log transaction

response



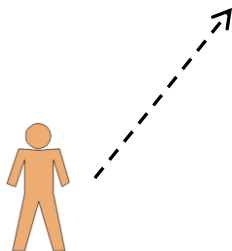
MA HIway Phase 2 Consent Approach

Patient consent on both sides of transaction



Record Locator Service

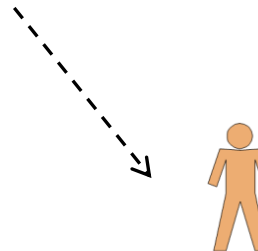
<u>Patient name</u> <u>events</u>	<u>Local name</u>	<u>Institution</u>	<u>MRN</u>	<u>Last event</u>	<u>#</u>
Jones, Jennifer L	Jones, Jennifer	Hospital A	1234	Dec 3, 2012	3
Jones, Jennifer L	Jones, Jenny	PCP	5678	Jul 8, 2010	12



Patient - Jennifer L Jones

Consent to Publish Provider Relationships

- Patient gives consent to a data holder to publish patient/entity relationship to the Mass HIway Record Locator Service (RLS)
- Patient consent preference captured by data holder and conveyed to RLS in an Admit, Discharge, Transfer (ADT) message (or other HIway-permitted format such as PIX/PDQ)
- Data holder retains consent documentation and transaction/disclosures log for audit



Patient - Jennifer L Jones

Consent to Search or Retrieve

- Patient gives consent to a data requestor to view RLS and retrieve records from a data holder – consent is conveyed in a query message
- Requesting organization retains consent documentation and transaction/disclosures log for audit



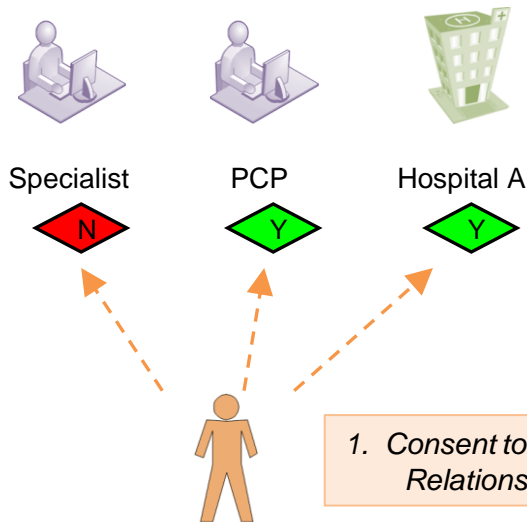
Data holder publishes patient/entity relationship to RLS



Record Locator Service

<u>Patient name</u>	<u>Local name</u>	<u>Institution</u>	<u>MRN</u>	<u>Last event date</u>	<u># events</u>
Jones, Jennifer L	Jones, Jennifer	Hospital A	1234	Dec 3, 2012	3
Jones, Jennifer L	Jones, Jenny	PCP	5678	Jul 8, 2010	12

2. Send demographics to RLS



Jennifer L Jones

1. Consent to Publish Provider Relationships

- Assume EHRs capable of capturing very limited consent information
- Patient consent flag conveyed in RLS update messages (ADT)
- Consent flag acts like memory-less toggle allowing relationship to be published in RLS
- If “yes”, relationship published in RLS
- If “no”, message rejected (ie, relationship not published in RLS)
- If changing:
 - “Yes-to-No”: If relationship was previously published, previous messages stored but hidden – only available for audit
 - “No-to-Yes”: Relationship published in RLS from that point forward



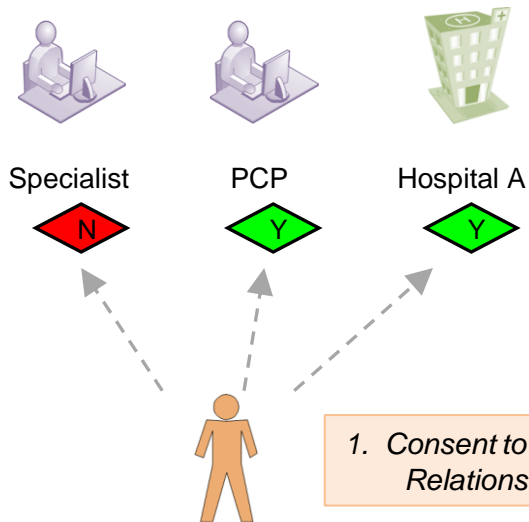
Data requestor requests patient record – Data holder responds



Record Locator Service

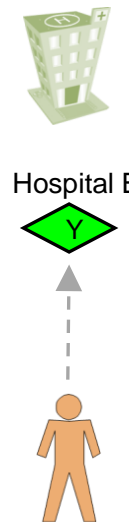
<u>Patient name</u>	<u>Local name</u>	<u>Institution</u>	<u>MRN</u>	<u>Last event date</u>	<u># events</u>
Jones, Jennifer L	Jones, Jennifer	Hospital A	1234	Dec 3, 2012	3
Jones, Jennifer L	Jones, Jenny	PCP	5678	Jul 8, 2010	12

2. Send demographics to RLS



Jennifer L Jones

4. View Patient Relationships (constrained to patients with established relationships)



Jennifer L Jones

3. Consent to Search or Retrieve

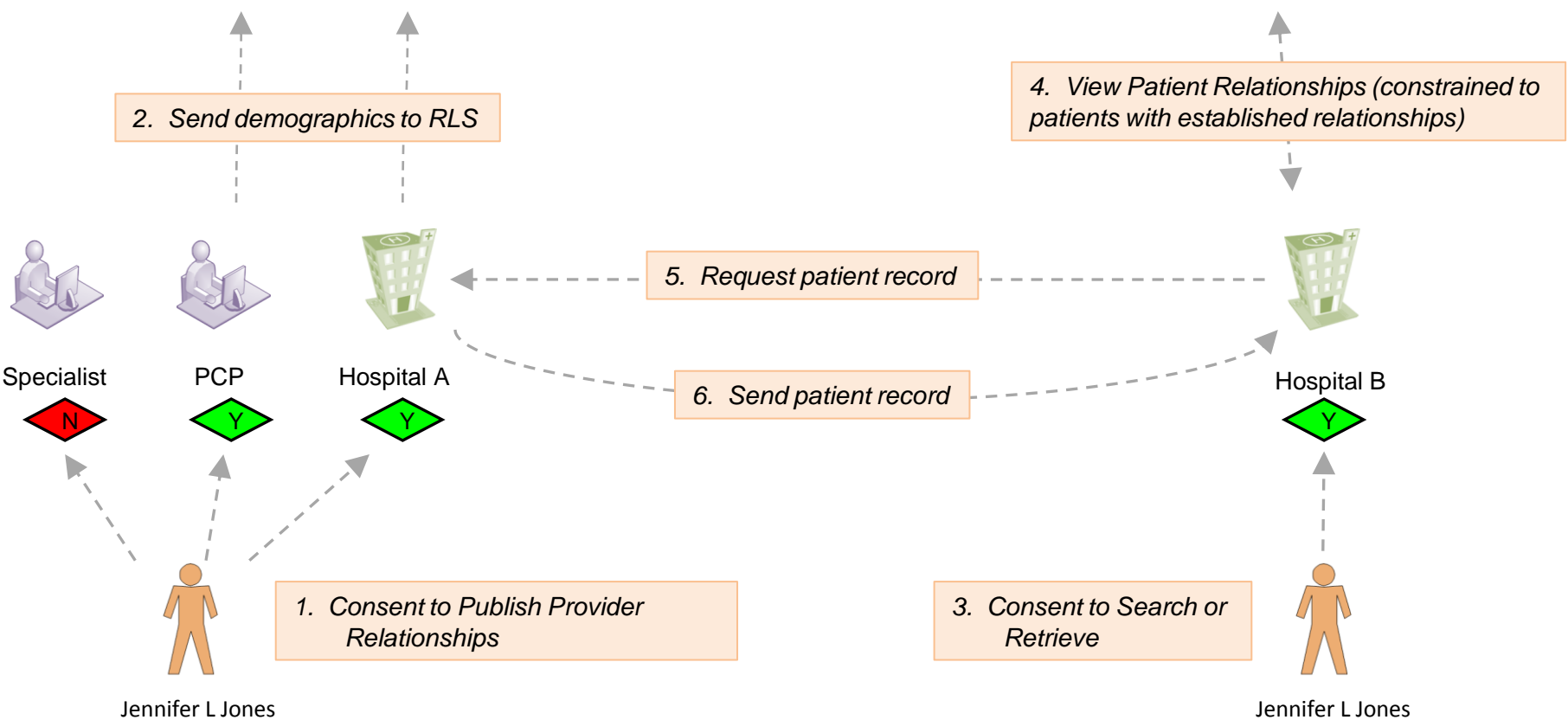


Data requestor requests patient record – Data holder responds



Record Locator Service

<u>Patient name</u>	<u>Local name</u>	<u>Institution</u>	<u>MRN</u>	<u>Last event date</u>	<u># events</u>
Jones, Jennifer L	Jones, Jennifer	Hospital A	1234	Dec 3, 2012	3
Jones, Jennifer L	Jones, Jenny	PCP	5678	Jul 8, 2010	12





Possible patient options



Patient Directory

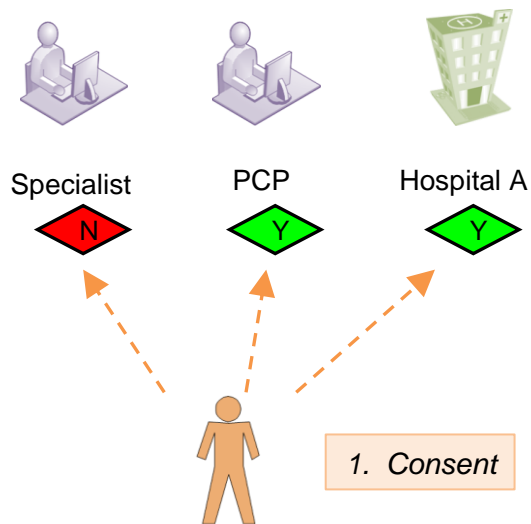
<u>Patient name</u>	<u>Local name Certificate</u>	<u>Institution</u>	<u>MRN</u>	<u>Direct address</u>
Jones, Jennifer L	Jones, Jennifer 34X&)VX	Hospital A	1234	Jennifer.Jones@hv.masshighway.net
Jones, Jennifer L	Jones, Jenny 34X&)VX	PCP	5678	Jennifer.Jones@hv.masshighway.net

2. Lookup Patient Address

3c. Notification of RLS Change

3b. View RLS or RLS Audit Log or Manage Consent?

3a. Send Record





Next steps



- **Pressure-test design**
 - Advisory Group feedback
 - Customer discovery sessions
 - More challenging scenarios (sensitive conditions, minors, etc)
- **Finalize design**
 - Define final requirements
 - Break out into phased releases



Discussion Item 3:

Mass HIway Update – Outreach & Sales Update, Implementation & Support Update, Phase 2 Update



Outreach

Sales

Implementation

Support



Last Mile Updates

- Hlway Interface Grants
 - In review now - notification of award early July
 - Good mix of applicants - small and large; specialty and general
 - Will provide review summary at the next Council meeting
- Hlway Implementation Grants
 - Held kick-off call – 70+ attended
 - Conducting ‘grantee-specific’ kick-offs now
 - Grantees and their collaborators are signing PAs
 - e.g. UMass Memorial Medical Center, Milford Regional Hospital, CVS Caremark, Overlook VNA



Outreach

Sales

Implementation

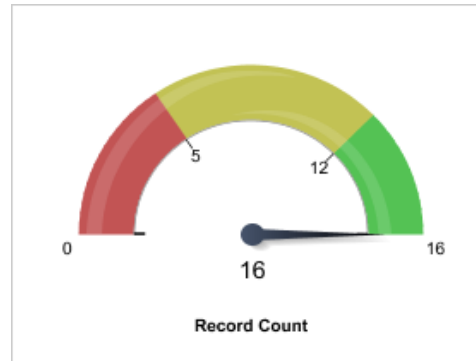
Support

as of 6/28/2013

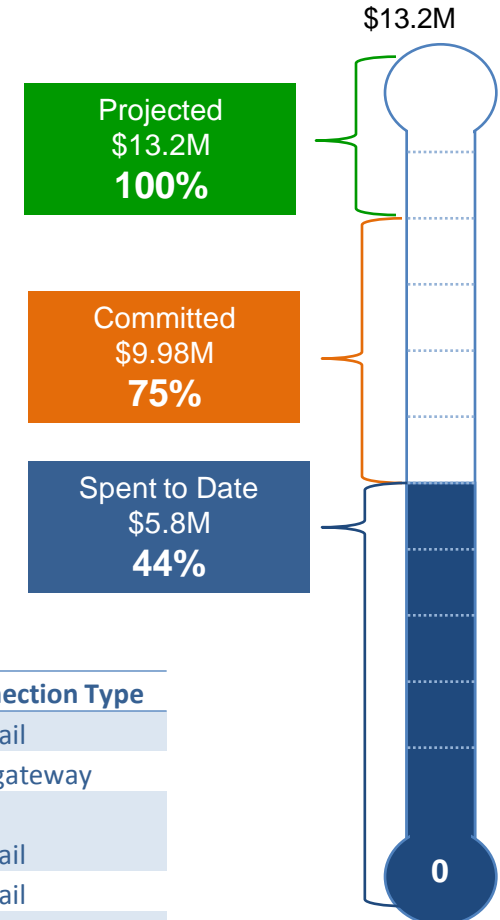
Opportunities (by stage)



PAs Signed to Q2 Target*



PA = Participation Agreement
*Signed PAs does not equate to Implementation

HIE Grant
Spend Down Tracker
as of 5/31/2013

Orgs 30-days to Hand-off to Ops

7

Organization Name	Connection Type
Fairlawn Rehabilitation Center	Webmail
Family Health Center of Worcester	LAND gateway
Holy Trinity Nursing and Rehabilitation Center	Webmail
Life Care Center of Auburn	Webmail
North Adams Regional Hospital	
Overlook VNA	LAND gateway
Radius Healthcare Center at Worcester	Webmail

Grants Awarded

Grant	#
HIway Interface Grants, v1	2
HIway Implementation Grants	32
HIway Interface Grants, v2	12-16 anticipated



Outreach

Sales

Implementation

Support



Organization	Use Case	Status/Target Date
Implementation		
Boston Public Health, Atrius, Children's, Partners	Care coordination, public health reporting	<ul style="list-style-type: none">• Various levels of testing
Metrowest, St. Vincent, Pediatric Care Associates, Notre Dame Long Term Care, UMASS, CVS Minute Clinics	Care coordination with Long Term Care facilities	<ul style="list-style-type: none">• Provisioning, with some level of testing
Harvard Pilgrim Health	Discharge summaries; data analytics	<ul style="list-style-type: none">• Completed extensive security testing• Working to exchange
Pilot Project:		
MEDITECH DIRECT Pilot	Pilot project with Jordan Hospital, Harrington Hospital, Berkshire Health, Holyoke Winchester and with Exeter Hospital (NH)	<ul style="list-style-type: none">• Held kick-off session on June 24• Working with each site for planning



Outreach

Sales

Implementation

Support

Organization	Use Case	Status/Target Date
Near Horizon:		
Baystate	PVIX implementation	• Kick-off – 7/2/13
Opiod Treatment Providers (DPH)	Intake, Enrollment, Assessment and Treatment	• Provider kick-off – 6/25/13
DPH – Immunization, ELR, Syndromic and CBHI	More active outreach to current users of DPH programs to move traffic to HIway	• Ongoing – with more concerted focus beginning in 3rd quarter
Last Mile Program Innovation Implementation Grants	Extensive set of use cases among community providers, local HIEs, facilities and service entities	• Active ongoing efforts ; project plans being finalized



Outreach

Sales

Implementation

Support



Organization	Use Case	Status/Target Date
Live		
Holyoke Medical Center/Holyoke HIE	First implementation of Direct connect among Holyoke Medical Center and its HIE, HealthConnect	<ul style="list-style-type: none">• Successful test with S/MIME and XDR• In process of loading providers• Working toward test exchange with Network Health in July
Tufts Medical Center	Discharge summaries, data reporting	<ul style="list-style-type: none">• Have completed testing with Network Health• Testing with Boston Public Health
Beaumont Medical	Part of the IMPACT grant with 16 other organizations including Reliant, Metrowest and several LTC facilities	<ul style="list-style-type: none">• In process of provisioning services for the other participants• Move to test with intent to move to production
Dr. Gregory Harris	Coordination of behavioral care with multiple facilities	



Outreach

Sales

Implementation

Support



Organization	Use Case	Status/Target Date
In Production		
BIDMC	Several use cases – registries, data analytics and information exchanged between provider organizations.	<ul style="list-style-type: none">• Partners: MAeHC; Network Health and DPH – Immunization• Testing: Boston Public Health; Atrius; Partners and DPH – Lab Reporting
Network Health	Receive Discharge Summaries from Tufts Medical Center and BIDMC	<ul style="list-style-type: none">• Partners: BIDMC• Testing: Working with Tufts Medical, Holyoke HIE, and Brockton Neighborhood Health Center
MAeHC	Analytic services, reporting with BIDMC	<ul style="list-style-type: none">• Partners: BIDMC• 79,119 transactions (as of 6/26/13)



Outreach

Sales

Implementation

Support



- Transactions exchanged for June 2013 – **106,331**. Cumulative transactions to date – 1,255,903
- Continued dialog and effort to determine the most effective, scalable means to establish “HISP” connections with vendors in a manner that maintains trust fabric.
 - Major issues to solve – authentication and authorization;
 - Direct Trust offers long-term promise;
 - Will need to cut some new ground as thinking and standard evolve



Phase 2 overall timeline



Mass HIway Phase 2 high level project schedule

Activity	Target date
Submit IAPD to CMS	Completed
CMS approval of Phase 2 IAPD	Completed
Phase 2 contract (or change order) executed	June 2013 Completed
Go-live - Public Health - Immunization Registry Node	Completed
Go-live - Public Health - Reportable Lab Results (ELR) Node	Completed
Testing - Public Health - Syndromic Surveillance Node	Completed
Testing - EOHHS – Children’s Behavioral Health (CBHI) Node	June 14, 2013 Completed
Go-live for Phase 2, Release 1 (Other Public Health interfaces)	May – Oct 2013
Phase 2 Requirements Gathering & Validation	July 26, 2013
Phase 2 Design Approach Decision	August 2, 2013
Go-live for Phase 2, Release 2 (EMPI, RLS, Consent, Provider Portal, Consumer Portal)	Oct 2013 – Mar 2014



Discussion Item 4:

Wrap up and next steps



HIT Council meeting schedule



HIT Council 2013 Meeting Schedule*:

- January 14 – 11th Floor Matta Conference Room
- February 4 – 11th Floor Matta Conference Room
- March 13 – 11th Floor Matta Conference Room
- April 8 – 21st Floor Conference Room
- May 6 – 21st Floor Conference Room
- June 3 – 21st Floor Conference Room
- July 1 – 21st Floor Conference Room
- **August 5**
- September 9
- October 7
- November 11
- December 9

**All meetings to be held from 3:30-5:00 pm at One Ashburton Place, 21st Floor, Boston, unless otherwise noted*



Wrap up



Next HIT Council Meeting: August 5, 2013

Preliminary Agenda:

- Customer Implementation Updates
- Advisory Group Update/Discussion
 - Discussion Topics?
- Mass Hlway Update